WHAT IS CLAIMED IS:

1.   A method for enabling a first
communications system and a second communications
system, respectively located behind a first firewall
and a second firewall, to directly communicate with
5   each other, wherein each of said first and second
firewalls respectively prevents communication initiated
from an external data network from reaching said first
or second communications system, said method
comprising:

10   establishing a first secure connection
via said external data network between said first
communications system and a central communications
station through said first firewall, wherein said first
secure connection is initiated by said first
15   communications system thereby being allowed to pass
through said first firewall;

establishing a second secure connection
via said external data network between said second
communications system and said central communications
20   station through said second firewall, wherein said
second secure connection is initiated by said second
communications system thereby being allowed to pass
through said second firewall;

forwarding connection information of
25   said second communications system to said first
communications system via said first secure connection
using said central communications station; and

transmitting data from said first
communications system to said second communications

30   system, wherein said data uses said connection
information of said second communications system as its
destination information and uses connection information
for said central communications station as its source
information so as to appear as if it had originated
35   from said central communications station.

       2.   The method of claim 1 wherein said
connection information for said second communications
system includes Internet protocol address and port of
said second communications system and wherein said
5   connection information for said central communications
station includes Internet protocol address and port of
said central communications station.

       3.   The method of claim 1 further
comprising:
       forwarding connection information of
said first communications system to said second
5   communications system via said second secure connection
using said central communications station; and

       transmitting data from said second
communications system to said first communications
system, wherein said data uses said connection
10   information of said first communications system as its
destination information and uses connection information
for said central communications station as its source
information so as to appear as if it had originated
from said central communications station.

4.   The method of claim 3 wherein said connection information for said first communications system includes Internet protocol address and port of said first communications system.

5.   A method for enabling a first communications system and a second communications system, respectively located behind a first firewall and a second firewall and having respective associated

5   first and second network address translation devices, to directly communicate with each other, wherein each of said first and second firewalls respectively prevents communication initiated from an external data network from reaching said first or second

10   communications system and wherein each of said first and second network address translation devices respectively provides public source information for outbound data originated from said first and second communications system, said method comprising:

15   establishing a first secure connection via an external data network between said first communications system and a central communications station through said first firewall, wherein said first secure connection is initiated by said first

20   communications system thereby being allowed to pass through said first firewall;

            establishing a second secure connection via said external data network between said second

communications system and said central communications
25   station through said second firewall, wherein said
second secure connection is initiated by said second
communications system thereby being allowed to pass
through said second firewall;

transmitting connection information for
30   establishing new connection with said first
communications system from said first communications
systems to said central communications station via said
first secure connection;

transmitting connection information for
35   establishing new connection with said second
communications system from said second communications
system to said central communications station via said
second secure connection;

forwarding said connection information
40   for establishing new connection with said second
communications system to said first communications
system via said first secure connection using said
central communications station;

transmitting a connection request from
45   said first communications system to said second
communications system wherein said connection request
uses said connection information for establishing new
connection with said second communications system as
its destination information;

50   forwarding said connection information
for establishing new connection with said first
communications system to said second communications

system via said second secure connection using said
central communications station;

55   transmitting connection acknowledgement
and request from said second communications system to
said first communications system wherein said
connection acknowledgement and request uses said
connection information for establishing new connection
60   with said first communications system as its
destination information; and

               in response to receiving said connection
acknowledgement and request from said second
communications system, transmitting a connection
65   acknowledgement from said first communications system
to said second communications system.

      6.   The method of claim 5 wherein:

               said connection information for
establishing a new connection with said first
communications system includes public Internet protocol
5   address provided by said first network address
translation device and port for said first
communications system's next connection; and

               said connection information for
establishing a new connection with said second
10   communications system includes public Internet protocol
address provided by said second network address
translation device and port for said second
communications system's next connection.

7.   A system for enabling a first
communications system and a second communications
system, respectively located behind a first firewall
and a second firewall, to directly communicate with
5   each other, wherein each of said first and second
firewalls respectively prevents communication initiated
from an external data network from reaching said first
or second communications system, said system
comprising:

10   means for establishing a first secure
connection via said external data network between said
first communications system and a central
communications station through said first firewall,
wherein said first secure connection is initiated by
15   said first communications system thereby being allowed
to pass through said first firewall;

               means for establishing a second secure
connection via said external data network between said
second communications system and said central
20   communications station through said second firewall,
wherein said second secure connection is initiated by
said second communications system thereby being allowed
to pass through said second firewall;

               means for forwarding connection
25   information of said second communications system to
said first communications system via said first secure
connection using said central communications station;
and

               means for transmitting data from said
30   first communications system to said second

communications system, wherein said data uses said
connection information of said second communications
system as its destination information and uses
connection information for said central communications
35   station as its source information so as to appear as if
it had originated from said central communications
station.

        8.   The system of claim 7 wherein said
connection information for said second communications
system includes Internet protocol address and port of
said second communications system and wherein said
5   connection information for said central communications
station includes Internet protocol address and port of
said central communications station.

        9.   The system of claim 7 further
comprising:
        means for forwarding connection
information of said first communications system to said
5   second communications system via said second secure
connection using said central communications station;
and

        means for transmitting data from said
second communications system to said first
10   communications system, wherein said data uses said
connection information of said first communications
system as its destination information and uses
connection information for said central communications
station as its source information so as to appear as if

15   it had originated from said central communications
station.

          10.   The system of claim 9 wherein said
connection information for said first communications
system includes Internet protocol address and port of
said first communications system.

          11.   A system for enabling a first
communications system and a second communications
system, respectively located behind a first firewall
and a second firewall and having respective associated

5   first and second network address translation devices,
to directly communicate with each other, wherein each
of said first and second firewalls respectively
prevents communication initiated from an external data
network from reaching said first or second

10   communications system and wherein each of said first
and second network address translation devices
respectively provides public source information for
outbound data originated from said first and second
communications system, said system comprising:

15   means for establishing a first secure
connection via an external data network between said
first communications system and a central
communications station through said first firewall,
wherein said first secure connection is initiated by

20   said first communications system thereby being allowed
to pass through said first firewall;

means for establishing a second secure connection via said external data network between said second communications system and said central

25   communications station through said second firewall, wherein said second secure connection is initiated by said second communications system thereby being allowed to pass through said second firewall;

means for transmitting connection

30   information for establishing new connection with said first communications system from said first communications system to said central communications station via said first secure connection;

means for transmitting connection

35   information for establishing new connection with said second communications system from said second communications system to said central communications station via said second secure connection;

means for forwarding said connection

40   information for establishing new connection with said second communications system to said first communications system via said first secure connection using said central communications station;

means for transmitting a connection

45   request from said first communications system to said second communications system wherein said connection request uses said connection information for establishing new connection with said second communications system as its destination information;

50   means for forwarding said connection information for establishing new connection with said

first communications system to said second
communications system via said second secure connection
using said central communications station;

55   means for transmitting connection
acknowledgement and request from said second
communications system to said first communications
system wherein said connection acknowledgement and
request uses said connection information for
60 establishing new connection with said first
communications system as its destination information;
and

         means for transmitting a connection
acknowledgement from said first communications system
65 to said second communications system in response to
receiving said connection acknowledgement and request
from said second communications system.

         12.   The system of claim 11 wherein:

         said connection information for
establishing a new connection with said first
communications system includes public Internet protocol
5 address provided by said first network address
translation device and port for said first
communications system's next connection; and

         said connection information for
establishing a new connection with said second
10 communications system includes public Internet protocol
address provided by said second network address

translation device and port for said second communications system's next connection.

13. A system for enabling two communications system, located behind firewalls, to directly communicate with each other, said system comprising:

a central communications station;

5   a first communications system and a second communications system, wherein each of said first and second communications system comprises a respective secure connection interface that establishes a secure connection with said central communications

10   station via an external data network through a network access;

a first firewall and a second firewall respectively located between said external data network and said first and second communications systems,

15   wherein each of said first and second firewalls respectively prevents communication initiated from said external data network from reaching said first or second communications system; and

said central communications station

20   comprises:

a secure connection interface that maintains secure connections with said first and second communications systems via said external communications network through a network access, and

25   a secure redirector that forwards
connection information of said second communications
system to said first communications system via said
secure connection with said first communications system
thereby enabling said first communications system to
30   transmit data to said second communications system,
wherein said data uses said connection information of
said second communications system as its destination
information and uses connection information for said
central communications station as its source
35   information so as to appear as if it had originated
from said central communications station.

14.   The system of claim 13 wherein said
connection information for said second communications
system includes Internet protocol address and port of
said second communications system and wherein said
5   connection information for said central communications
station includes Internet protocol address and port of
said central communications station.

15.   The system of claim 13, wherein said
secure redirector additionally forwards connection
information of said first communications system to said
second communications system via said secure connection
5   with said second communications system thereby enabling
said second communications system to transmit data to
said first communications system, wherein said data
uses said connection information of said first
communications system as its destination information
10   and uses connection information for said central

communications station as its source information so as to appear as if it had originated from said central communications station.

16. The system of claim 15 wherein said connection information for said first communications system includes Internet protocol address and port of said first communications system.

17. A system for enabling two communications system, located behind firewalls and having associated network translation devices, to directly communicate with each other; said system comprising:

5   a central communications station;

a first communications system and a second communications system, wherein each of said first and second communications system comprises:

a respective secure connection
10   interface that establishes a secure connection with said central communications station via an external data network through a network access, and

a respective transmitter that transmits connection information for establishing a new
15   connection with a respective one of said first and second communications system to said central communications station via said secure connection;

a first firewall and a second firewall respectively located between said external data network

20   and said first and second communications systems,
        wherein each of said first and second firewalls
        respectively prevents communication initiated from said
        external data network from reaching said first or
        second communications system; and

25   a first network address translation
        device and a second network address translation device
        respectively associated with said first and second
        communications systems, wherein each of said first and
        second network address translation devices respectively
30   provides public source information for outbound data
        originated from said first and second communications
        system; wherein:

                        said central communications station
        comprises:

35   a secure connection interface that
        maintains secure connections with said first and second
        communications systems via said external communications
        network through a network access, and

                        a secure redirector that:

40   forwards said connection
        information for establishing new connection with said
        second communications system to said first
        communications system via said secure connection with
        said first communications system thereby enabling said
45   first communications system to transmit a connection
        request to said second communications system wherein
        said connection request uses said connection
        information for establishing new connection with said

second communications system as its destination
50   information, and

                               forwards said connection
information for establishing new connection with said
first communications system to said second
communications system via said secure connection with
55   said second communications system, thereby:

                               enabling said second
communications system to transmit connection
acknowledgement and request from said second
communications system to said first communications
60   system wherein said connection acknowledgement and
request uses said connection information for
establishing new connection with said first
communications system as its destination information,
and

65   enabling said first
communications system to transmit a connection
acknowledgement from said first communications system
to said second communications system.

     18.   The system of claim 17 wherein:

         said connection information for
establishing a new connection with said first
communications system includes public Internet protocol
5   address provided by said first network address
translation device and port for said first
communications system's next connection; and

said connection information for establishing a new connection with said second

10 communications system includes public Internet protocol address provided by said second network address translation device and port for said second communications system's next connection.

19. A central communications station for enabling a first communications system and a second communications system, respectively located behind a first firewall and a second firewall, to directly

5 communicate with each other, wherein each of said first and second firewalls respectively prevents communication initiated from an external data network from reaching said first or second communications system, said central communications station comprising:

10 means for maintaining a first secure connection with said first communications system via said external data network through said first firewall, wherein said first secure connection is initiated by said first communications system thereby being allowed

15 to pass through said first firewall;

means for maintaining a second secure connection with said second communications system via said external data network through said second firewall, wherein said second secure connection is

20 initiated by said second communications system thereby being allowed to pass through said second firewall; and

means for forwarding connection information of said second communications system to

said first communications system via said first secure
25   connection thereby enabling said first communications
system to transmit data to said second communications
system, wherein said data uses said connection
information of said second communications system as its
destination information and uses connection information
30   for said central communications station as its source
information so as to appear as if it had originated
from said central communications station.

20.   The central communications station of
claim 19 wherein said connection information for said
second communications system includes Internet protocol
address and port of said second communications system
5   and wherein said connection information for said
central communications station includes Internet
protocol address and port of said central
communications station.

21.   The central communications station of
claim 19 further comprising:
means for forwarding connection
information of said first communications system to said
5   second communications system via said second secure
connection thereby enabling said second communications
system to transmit data to said first communications
system, wherein said data uses said connection
information of said first communications system as its
10   destination information and uses connection information
for said central communications station as its source

information so as to appear as if it had originated from said central communications station.

22. The central communications station of claim 21 wherein said connection information for said first communications system includes Internet protocol address and port of said first communications system.

23. A central communications station for enabling a first communications system and a second communications system, respectively located behind a first firewall and a second firewall and having
5   respective associated first and second network address translation devices, to directly communicate with each other, wherein each of said first and second firewalls respectively prevents communication initiated from an external data network from reaching said first or
10   second communications system and wherein each of said first and second network address translation devices respectively provides public source information for outbound data originated from said first and second communications system, said central communications
15   station comprising:

means for maintaining a first secure connection via an external data network with said first communications system through said first firewall, wherein said first secure connection is initiated by
20   said first communications system thereby being allowed to pass through said first firewall;

means for maintaining a second secure connection via said external data network with said second communications system through said second

25 firewall, wherein said second secure connection is initiated by said second communications system thereby being allowed to pass through said second firewall;

means for obtaining connection information for establishing new connection with said

30 first communications system from said first communications systems via said first secure connection;

means for obtaining connection information for establishing new connection with said

35 second communications system from said second communications system via said second secure connection;

means for forwarding said connection information for establishing new connection with said

40 second communications system to said first communications system via said first secure connection thereby enabling said first communications system to transmit a connection request to said second communications system, wherein said connection request

45 uses said connection information for establishing new connection with said second communications system as its destination information; and

means for forwarding said connection information for establishing new connection with said

50 first communications system to said second communications system via said second secure connection, thereby:

enabling said second communications system to transmit connection acknowledgement and

55 request to said first communications system wherein said connection acknowledgement and request uses said connection information for establishing new connection with said first communications system as its destination information, and

60 enabling said first communications system to transmit a connection acknowledgement to said second communications system in response to receiving said connection acknowledgement and request from said second communications system.

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24. The central communications station of claim 23 wherein:

said connection information for establishing a new connection with said first

5 communications system includes public Internet protocol address provided by said first network address translation device and port for said first communications system's next connection; and

said connection information for

10 establishing a new connection with said second communications system includes public Internet protocol address provided by said second network address translation device and port for said second communications system's next connection.

25. A central communications station for enabling a first communications system and a second communications system, respectively located behind a first firewall and a second firewall to directly

5   communicate with each other, wherein each of said first and second firewalls respectively prevents communication initiated from an external data network from reaching said first or second communications system, said central communications station comprising:

10   a secure connection interface that maintains secure connections with said first and second communications systems through a network access to said external communications network; and

          a secure redirector that forwards

15 connection information of said second communications system to said first communications system via said secure connection with said first communications system thereby enabling said first communications system to transmit data to said second communications system,

20 wherein said data uses said connection information of said second communications system as its destination information and uses connection information for said central communications station as its source information so as to appear as if it had originated

25 from said central communications station.

26. The central communications station of claim 25 wherein said connection information for said second communications system includes Internet protocol address and port of said second communications system

5   and wherein said connection information for said
     central communications station includes Internet
     protocol address and port of said central
     communications station.

          27.   The central communications station of
     claim 25, wherein said secure redirector additionally
     forwards connection information of said first
     communications system to said second communications
5   system via said secure connection with said second
     communications system thereby enabling said second
     communications system to transmit data to said first
     communications system, wherein said data uses said
     connection information of said first communications
10   system as its destination information and uses
     connection information for said central communications
     station as its source information so as to appear as if
     it had originated from said central communications
     station.

          28.   The central communications station of
     claim 27 wherein said connection information for said
     first communications system includes Internet protocol
     address and port of said first communications system.

          29.   A central communications station for
     enabling a first communications system and a second
     communications system, respectively located behind a
     first firewall and a second firewall and having

5 respective associated first and second network address
translation devices, to directly communicate with each
other, wherein each of said first and second firewalls
respectively prevents communication initiated from an
external data network from reaching said first or
10 second communications system and wherein each of said
first and second network address translation devices
respectively provides public source information for
outbound data originated from said first and second
communications system, said central communications
15 station comprising:

  a secure connection interface that
maintains secure connections with said first and second
communications systems via said external communications
network through a network access; and

20   a secure redirector that:

   forwards said connection
information for establishing new connection with said
second communications system to said first
communications system via said secure connection with
25 said first communications system thereby enabling said
first communications system to transmit a connection
request to said second communications system wherein
said connection request uses said connection
information for establishing new connection with said
30 second communications system as its destination
information, and

   forwards said connection
information for establishing new connection with said
first communications system to said second
35 communications system via said secure connection with

said second communications system, thereby:

enabling said second
communications system to transmit connection
acknowledgement and request from said second
40   communications system to said first communications
system wherein said connection acknowledgement and
request uses said connection information for
establishing new connection with said first
communications system as its destination information,
45   and

enabling said first
communications system to transmit a connection
acknowledgement from said first communications system
to said second communications system

50

30. The central communications station of
claim 29 wherein:

said connection information for
establishing a new connection with said first
5   communications system includes public Internet protocol
address provided by said first network address
translation device and port for said first
communications system's next connection; and

said connection information for
10   establishing a new connection with said second
communications system includes public Internet protocol
address provided by said second network address
translation device and port for said second
communications system's next connection.